AMENDMENTS TO CLAIMS

Please amend the Claims as follows:

Listing of Claims:

1-20 (Cancelled)

21. (New) A measuring device for optically analyzing a diagnostic test element, the measuring device comprising:

a light source having at least one organic light-emitting diode;

imaging optics;

a photodetector; and

a device adapted to position the test element in an optical path between the light source and the photodetector, wherein the light source forms a composite structure including a support substrate, the imaging optics and the photodetector, and wherein the support substrate is transparent.

22. (New) The measuring device of claim 21 wherein the support substrate is formed of a transparent material selected from the group consisting of glass and a multilayer polymer film.

23. (New) The measuring device of claim 21 wherein a plurality of organic light-emitting diodes are arranged on the support substrate as a one-dimensional or two-dimensional light-emitting pixel array.

24. (New) The measuring device of claim 23 wherein the organic light-emitting diodes have emission wavelength ranges that are different from one another.

25. (New) The measuring device of claim 23 wherein the organic light-emitting diodes are aligned in a grid-like manner on different illumination target areas.

26. (New) The measuring device of claim 21 wherein the at least one organic light-emitting diode includes two electrode layers and an intermediate sandwich-like electroluminescent light-emitting layer that is formed from a polymer.

27. (New) The measuring device of claim 21 wherein the at least one organic light-emitting diode has a pixel size of less than 500 μm.

28. (New) The measuring device of claim 21 wherein the at least one organic light-emitting diode has a pixel size of less than 200 μm.

29. (New) The measuring device of claim 21 wherein the at least one organic light-emitting diode has a transparent front electrode layer adjoining the support substrate and a rear electrode layer facing away from the substrate.

30. (New) The measuring device of claim 21 wherein the imaging optics has at least one optical lens formed to form an image of the light source on a target area of the test element.

31. (New) The measuring device of claim 21 wherein the imaging optics has at least one optical lens formed to form an image of the light source on the photodetector.

32. (New) The measuring device of claim 21 wherein the imaging optics has a plurality of microstructured, aspherical lens units in a two-dimensional arrangement.

33. (New) The measuring device of claim 21 wherein the imaging optics is formed by a lens structure molded onto the support substrate by embossing.

34. (New) The measuring device of claim 21 wherein the imaging optics is formed by a polymer-based foil material having a lens structure that is joined to the support substrate in a planar fashion.

35. (New) The measuring device of claim 21 wherein the at least one organic light-emitting diode is arranged on one side of the support substrate and the imaging optics are arranged on an opposite side of the support substrate.

36. (New) The measuring device of claim 21 wherein the photodetector is formed by at least one layer-shaped organic photodiode.

37. (New) The measuring device of claim 36 wherein a plurality of organic photodiodes are arranged on the support substrate as a linear or a planar sensor pixel array.

38. (New) The measuring device of claim 36 wherein the at least one organic light-emitting diode and the at least one photodiode are applied to the support substrate by a coating process.

39. (New) The measuring device of claim 36 wherein a plurality of organic light-emitting diodes and photodiodes are locally combined as elementary photometers and are arranged as a matrix on a surface of the support substrate to form a multiple photometer.

40. (New) The measuring device of claim 21 wherein the positioning device includes a holder, a guide or a stop for the test element.

41. (New) The measuring device of claim 21 wherein a surface of the at least one organic light-emitting diode is screened from the environment in a material-tight manner by a coating or a housing.

42. (New) The measuring device of claim 21 wherein the test element is formed by a test strip provided with optically scannable indicator fields for biological substances to be detected and designed as a disposable article.

43. (New) An optical measuring device formed to photometrically analyze a diagnostic test strip, the device comprising:

a positioning unit for the test strip; and

a composite structure including a light source formed by an organic light-emitting diode, an imaging optics, a photodetector having a polymer photodiode, and a transparent support substrate formed to support the light source, imaging optics, and the photodetector.

44. (New) A measuring device for optically analyzing a diagnostic test element, the measuring device comprising:

a light source having at least one organic light-emitting diode;

a photodetector; and

a device formed to position the test element in an optical path between the light source and the photodetector, wherein the light source forms a composite structure including a transparent support substrate and the photodetector.